

ABSTRACT OF THE DISCLOSURE

In a solid-oxide fuel cell assembly, a sealing gasket between each
5 individual component or sub-assembly and an integrating component manifold,
comprising a gas-filled pillow structure formed in the general shape of the
manifold opening to be sealed. The gasket acts as a passive gas spring that
responds with increased seating force to increased temperature. In a currently
preferred embodiment, the gasket comprises first and second elements formed
10 from sheet or foil metal stock having mating concavities and joined along their
mutual surfaces to form linear gas-filled pillows in the shape of each opening to
be sealed. Preferably, the first and second elements are respectively formed of
the same material as the surface to be sealed, allowing the elements to become
diffusion bonded on their outer surfaces to their respective component surfaces.

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